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TRENDS IN EDUCATION

School Administrators' and Educational Specialists' Workshop

Brigham City, Utah — June 15-26, 1959

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Branch of Education

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INTRODUCTION

Key school administrative and supervisory personnel from the Bureau and Indian leaders from fifteen tribes participated jointly in a two-week workshop. The purpose of this conference was to weigh the progress that has been made in the last two years toward improving the educational programs in Bureau schools.

As preparation for their participation as technical staff, the educational specialists prepared fact sheets on trends in education. The papers are published as a separate part of the final workshop report so that they may be attached to the report of the 1958 Educational Specialists' Conference.

AUDIO-VISUAL AND LIBRARY SERVICES

Although the last year has seen no earth-shattering developments in the library and the A-V field, the tendency of these materials of instruction to move more closely to each other has been marked and encouraging.

Books are often the key to knowledge; A-V materials often the key to greater retention, deeper understanding, and improved motivation for learning. Despite these promises, there are times when both seem to have lost their way.

In some schools, funds for the salary of a librarian or to keep the library functioning have been lost. As we try to help our learners bridge the cultural gap - learners from a nonbook background - the loss of a strong, working library with a professional in charge is indeed unfortunate.

Audio-Visual materials, sometimes defined as everything from chalkboards to teacher (if attractive), have also missed the mark. Too often they have promised educational "moons" impossible of achievement, or the apparent complexity of equipment has been frightening.

Administrators have not always understood just what the newer A-V materials might do to improve the quality of teaching or how to use them. Some of the "cut and try" efforts have been disappointing. Gradually in the school world the place of both books and A-V is becoming clearer. Both are instructional materials to be chosen, used, and evaluated exactly as any other material is chosen or used. Whether it be a movie, still picture, or educational record, it must serve a purpose and help achieve a definite goal or it should not be used in the classroom as teaching material.

In order to make the classroom use more practical, forward-looking administrators are assigning clerical duties (orders, typing, checking and returning) to clerks. All mechanical phases of equipment operation are taken over by vocational or maintenance personnel. Each classroom has <u>trained</u> students to operate any equipment the teacher needs. The selection, preparation, use, and follow-up of any material is the work of the teacher. Increasingly, the teacher's duties are professional, instructional ones.

Larger school libraries have staffs of librarians and A-V personnel. The mechanics and clerical functions are handled elsewhere as we have mentioned; but the materials, guidance, and help with selection come from the library and the A-V staff. Often this is called the instructional materials center. Smaller schools have a combined position - a person skilled in librarianship and A-V materials. Thus, teacher or student searching for material find books, records, strips, still pictures, and information about others - not on hand but obtainable - all consolidated in one location. A central catalogue - a central location - a renewed realization of the value of a strong library - an understanding that A-V materials are instructional rather than miraculous. These are trends on the current Library and A-V scene.

Fred C. Clark, Jr.
Educational Specialist (A-V)

AUDIO-VISUAL RESEARCH

The Educational Motion Picture

In some quarters there is the mistaken idea that pictorial materials are somehow an inferior medium which is for the poor teacher or the low-grade student. Actually, research studies show (e. g., Vernon, 1946; Meierhenry, 1952; Nerden, 1954) that the better teachers get better results from films and the most intelligent students learn more from them. The better teachers also use more films. 1/

In Vernon's study, it was found that students in classes with a better teacher showed more learning from a film, even if the teacher had nothing to do during its presentation. This correlation suggests that the good teacher may have created a higher level of motivation to learn. Similarly, the parents will have an important influence on, or role in, the student's motivation to learn which should affect his learning from films as well as from other classroom methods.

Allison and Ash (1951) have shown that telling students that the material in a film is important and difficult improves their learning. 2/

Howell (1954) found that when a motion picture was used as a basis of class discussion, the ratio of student-participation to teacher-talking time was increased. 3/

Research shows that when a film is used for the teaching of facts, the appreciable gain is confined to the first two showings, after which there is a very rapid decline in the amount learned. 4/

Research shows that a variety of methods is more effective than any single audio-visual tool. In this context, the facts and promises of educational television are examined. The study concludes: "There is no clear evidence as yet of a major break-through in the

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1/ Neal E. Miller, "Graphic Communication and the Crisis in Education." Audio-Visual Communication Review, Vol. 5, No. 3. Dec. 1957, p. 37

2/ Miller, Op. Cit., p. 74

3/ Ibid.

4/ C. L. McTavish, "Effects of Repetitive Film Showings on Learning," Instructional Film Research Program, SDC 269-7-12. Pennsylvania State College, Nov. 1949

speed or effectiveness of learning because of classroom television. This medium, like the others....is another effective aid in the teaching process. It is not the educational revolution." 5/

Research in the field of education has demonstrated repeatedly that passive spectatorship is a poor way to learn, and various types of experiments in instructional communication with such groups as the Armed Forces confirm it. For example, it has been shown that students learn new words faster by repeating them along with a teaching film. And, in such studies as foreign languages, there have been many successful experiments with techniques which emphasize participation involving activity and practice. An important kind of active participation is represented by the group-learning situation, which places emphasis upon individuals acting in cooperation with each other. Examples can be furnished from both ends of the chronology of education-- the modern elementary school, which stresses group cohesiveness and learning as a process related to other learners, and the college seminar. 6/

On the basis, therefore, of a number of studies summarized, Hoban and van Ormer (1950) suggest that learning from motion pictures often is especially well-retained. 7/

Need for Teacher Training

Only about 20 percent of the teachers in this country get formal course work in the audio-visual field. Most of them have no opportunity during their teacher education to see the key films, filmstrips, or slides in their fields. Their education in this respect occurs on the job, if at all. 8/

A University of Wisconsin study (White, 1953) reports that a great proportion of secondary teachers who studied there did not even know what a filmstrip projector was. In other cases the teachers may know something about these new techniques, but not enough to anticipate using them with success.

A rough estimate is that at present only 20 percent of practicing teachers have had a course in audio-visual methods.

5/ Audio-Visual Instruction, "EPC Study Shows Depth of Thinking," Sept. 1958, p. 180
6/ Brown, Lewis, Harcleroad, AV Instruction Materials and Methods, McGraw-Hill Book Company, New York, pp. 11-12
7/ Miller, Op. Cit., p. 107
8/ Ibid., pp. 22-23

Furthermore, some of the courses, as might be expected, leave much to be desired. Prospective teachers are taught about graphic communication but not by means of it. 9/

Some teachers may be insecure and fear being replaced by the film. That such insecurity may be a source of resistance is suggested by Vernon's (1946) finding that it was the poorest teachers who failed to see any advantage in the use of motion pictures. Conversely, Nerden (1954) found that the film users tended to be the more highly cooperative teachers who assumed additional responsibilities both in the school and the community, conducted student-centered classrooms, and were accustomed to using all kinds of learning resources. These studies indicate that the generally better teachers tend to use the new pictorial techniques. 10/

One of the problems of efficient teaching is to build up a discrimination so that the student will respond only to the relevant cues and not be misled or distracted by the irrelevant ones. Gagne and Foster (1949) found that giving preliminary training with a little booklet containing pictorial representations of a task improved subsequent learning. They believe that one of the main functions of this preliminary training was to help the students to learn to differentiate the relevant cues. We would expect motion pictures to be able to improve learning by focusing attention on the relevant cues. 11/

It takes skill and judgment for a teacher to make the best use of the motion picture as a means of introducing, developing, and summarizing units of study, because the fitness of a picture in these connections depends on some very complicated variables--among them the pupil, the teacher, the curriculum, and the film itself. Teachers need to maintain a flexible and reasonably liberal attitude about their choice of films, and they ought not to be too narrowly logical. For example, a film that provides a general survey of a large body of knowledge may at the same time be useful at any stage of a unit and may be as effective in initiating as in concluding it.

9/ Miller. Op. Cit., pp. 40-41
10/ Ibid., p. 36
11/ Ibid., p. 83

There are no criteria for choosing and judging educational films that can take the place of common sense, discrimination, and experience, but it is possible to phrase some basic tests that may valuably supplement these requirements and guide the application of them. Films, to be educationally worthwhile, must:

1. Be appropriate to the stage of development of the pupils.

2. Provide a content that is of direct interest and value to them.

3. Be related to their curriculum by virtue of important information or inspiration.

4. Be authentic and truthful in substance and treatment.

5. Have technical merit--good photography, sound, and general arrangement, besides, of course, general good taste. 12/

Effective use of audio-visual materials requires that they be selected in terms of clearly perceived goals. Teachers need to be clear as to the knowledge they want their pupils to acquire, the skills they wish them to develop, the understandings they desire them to build, and the attitudes they hope they will form. Desirable use of audio-visual materials requires teachers to serve as guides to learners, not merely as dispensers of information. 13/

The report by Wesley G. Meierhenry, Enriching the Curriculum Through Motion Pictures (Lincoln: University of Nebraska Press, 1952), on a four-year program of films in Nebraska secondary schools summarizes the educational values of the motion picture as follows:

1. Motion pictures enrich the learning process and lead to greater all-around achievement. (Chapter VI)

2. Motion pictures directly modify beliefs in desirable directions and cause students to seek additional information about subjects studied. (Chapter VII)

12/ Lester B. Sands, Audio-Visual Procedures in Teaching, 1956. Chapter 20, pp. 356-357

13/ Paul W. F. Witt, "Some If's About AV." Audio-Visual Instruction, September 1958, pp.178-179

3. Motion pictures improve educational achievement by different amounts in different subjects, and their influence is greater in larger classes than in smaller, although no significant differences are observable in the amount of knowledge gained. (Chapter VIII)

This report on a program conducted for four years under a Carnegie Foundation grant shows that teachers and administrators are deeply concerned about making the best use of school time. (Chapter XII) The study shows that the use of films taught the teachers to allot and plan their time more carefully because it was necessary to schedule the picture showings in advance for the whole school year. Also, motion pictures - because of the number and variety of the aspects of their subject matter - seemed to expand the imaginations of teachers and prompt them to read extensively to prepare themselves for answering the questions that the motion pictures would probably raise. Class discussion became more energetic and controversial and put the teachers under pressure to give themselves thorough preparation.

The students who participated in this experimental program are reported as having given both general and specific testimony in its favor. They said among other things that "the use of motion pictures in science, the social studies, and the convocations helped to clarify many concepts....'History is made more lifelike and realistic when motion pictures are used.' Motion pictures on heredity resulted in a student panel discussion requiring research in a wide variety of printed materials." 14/

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14/ Sands, Loc. Cit.

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GROUPING AND PROMOTION

"Children learn much from their teachers. But children learn at least as much, or more, from one another."

The classroom society embraces a wide range of individual differences and instills and encourages such ideals as an abiding faith in the individual, his dignity, his worth, his freedom, and his essential equality.

Grouping provides a social setting where boys and girls have every possible encouragement to grow socially, emotionally, physically, and intellectually. A group that embraces many differences offers a special stimulation for growth for boys and girls who are unlike one another in many ways.

Children are grouped in such a way that the classes in each grade have about the same median age. Each grade has its leaders and followers, mature and immature children, imitators and conformers, children who require little time of adults, and children who require a great deal. These children are evenly distributed among the groups.

Each group includes children who differ greatly in mental ability. Each class is made up of children of varying intellectual abilities.

Each group includes children who are physically immature and physically skillful.

In the elementary school, special abilities begin to blossom, abilities in art, music, dramatics, cooking, photography, and crafts. If the classroom is to serve as a laboratory where children learn from one another, talented boys and girls must be spread out among the various groups. By distributing talent, we expose children to a wide range of interests and encourage each pupil to discover and develop his own interests.

When each class contains roughly the same number of boys and girls, it is more likely that the children will have the opportunity to learn to get along with members of the other sex.

Children from the same neighborhoods are not assigned to the same group, nor are they assigned to the same teacher year after year.

As friendships grow, cliques arise, and interrelationships emerge, the effects on the child should be evaluated. If separation is wise, certain children should be separated. When children depend upon one another for successive schooling, it is wise to keep them together.

Children interact with teachers, so a highly sensitive, retiring child should probably be assigned to a calm, reassuring teacher, not to an effervescent or highly enthusiastic teacher. Faculty members have to take special care to be highly objective.

A strong concern expressed by parent or teacher should be given appropriate consideration.

When a staff shares the responsibility for grouping, teachers are much more sensitive to children's qualities, far more aware of the interplay of qualities in a class, and continuously aware of the importance of grouping. Having helped assign the children, teachers are far more satisfied with the make-up of their groups.

... George E. Raab

The ultimate goal of education is identical with that of living; the achievement of wholeness, of integrity, of a unified selfhood. To experience this and to help others experience this is the most satisfying and creative aspect of living.

... Hugh Perkins

Most pupils make normal progress through the grades, but because of differences in capacity, pupils progress at varying rates. Therefore, promotion or nonpromotion is an individual problem with each student. Ordinarily, no pupil is retained more than once in the first three grades, nor more than once in the remaining elementary grades. It is advocated as an educationally sound policy that a student be with his age group whenever possible.

When a student deviates too widely from the average to be handled in a regular classroom, he should be considered for special placement with the decision still an individual problem. This same policy shall be in effect for students who are overage or have been retarded and are enrolling in our schools for the first time from other schools.

... William F. Hall

Children should be promoted on the basis of their total adjustment rather than academic achievement alone.

... Demarest, Coffield, and Bloomers

In order to select children for each reading level within the grade, all the teachers of that grade meet together in the fall and divide the students into groups based on the results of tests and previous teacher observations.

... Cook

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IMAGES OF THE FUTURE

A New Approach to the Secondary School

... by J. Lloyd Trump

The secondary school of the future will not have standard classes of 25 to 35 students meeting five days a week on inflexible schedules. Both the size of the groups and the length of the classes will vary from day to day. No longer will one teacher be in charge of all of the activities of a class in one subject. Instead, teaching will be organized for greater efficiency and effectiveness.

The school will be organized around three kinds of activities:

1. Large-group instruction
2. Individual study
3. Small-group discussions

Large-Group Instruction

Large-group instruction will include a number of activities carried out in groups of 100 or more students. Instructions and discussions will be conducted by teachers who are particularly competent and who will utilize the best possible instructional aids.

Individual Study

Students will engage in study activities as individuals or in groups of two or three with a minimum of constant supervision. Students will read, listen to records and tapes, question, experiment, examine, consider evidence, analyze, etc. Study activities will require that students progressively take more responsibility for self-direction.

Small-Group Discussions

Small groups of 12 to 15 students and a teacher will pit mind against mind to sharpen understanding. Discussion activities will occupy about 20 percent of the students' time. This new concept will bring forth a variety of study patterns. No longer will one teacher have the responsibility of teaching all-of-a-subject group of 25 students or more meeting as a class five days a week. Much more emphasis will be placed on training students to check their own progress and make more immediate self-appraisals, using a variety of machines and self-marking tests.

Possibly no bells will ring in the schools of the future. The school-of-the-future instructional staff will include the following categories of personnel:

professional teachers
  teacher-specialists
  general teachers
    instruction assistants
    clerks
    general aids
    community consultants
    staff specialists

In a school of 400 students there will be:

10 professional teachers---full time
instruction assistants---200 hours a week
clerical assistants---100 hours a week
general aids---50 hours a week
community consultants and staff specialists---as needed

The secondary school of the future will provide for closer relationship between student and teacher. The student will be able to develop a closer rapport with the teacher when he consults him as an individual. Maturing students must face the fact that teachers will not always be there to make them study. The teacher will be more of a consultant and less a task master.

According to a number of surveys, today's average teacher works about a 48-hour week. Teachers usually spend 26 to 27 of these hours before students, five classes per day, five days per week -- plus some study hall supervising. By contrast, the professional, or career, teacher-specialist in the future school will average 18 hours per week with student groups. Nine and a half hours will be spent in large-group instruction and eight and a half hours with small discussion groups. Most teachers, of course, will spend time according to their individual interests and capacities. The school will recognize individual differences in teachers and utilize them accordingly.

Career teachers will have more time to devote to studying new developments and research findings in their own fields and doing professional tasks.

Changing staffing patterns will affect costs. Here is a comparison of illustrative costs of today's secondary school with the one of the future. These figures are for a school with 400 students, or for each 400 students in a larger school.

Now		
	16 teachers - average salary $5,500	$88,000
	Some clerical help (charged to principal's budget)	-
	Total	$88,000
Future		
	5 teacher-specialists - average salary $8,000	$40,000
	5 general teachers - average salary $5,500, same as present	27,500
	instruction assistants - 200 hours per week, $1.80 per hour	12,960
	clerks - 100 hours per week, $1.40 per hour	5,040
	general aids - 50 hours per week, $1.30 per hour ...	2,340
	Total	$87,840

There will be no difference in the cost of staff specialists and community consultants so these are not included.

Improved utilization of school facilities and teachers will mean that the school will operate more hours each day, more days in the year. This extended schedule will not require teachers to work a longer day or a six-day week. But those who are willing to work longer hours will be able to do so and receive higher salaries. Salaries will take into consideration training and experience, quality of service, and hours actually worked. The fact that better teaching means better education will be fully appreciated.

In planning the facilities of the secondary school of the future, these things will be considered:

1. Educational facilities will not be only a school building and its grounds.

2. Space within the building will be planned for what will be taught in it and how it will be taught.

3. Installations for effective use of electronics and mechanical aids will be provided.

The number and size of classrooms for 400 students is still not a definite determination. Educational facilities will be greatly changed in many areas. They will be more functional, flexible, pleasant and utilitarian, and have improved acoustics, better light and ventilation control.

The secondary school of the future will play a much more active role in recruiting, screening, and training its personnel even before they become staff members. Programs of internship and post-graduate professional courses will be available to those who are late in developing interests in teaching. Teachers are not completely trained when they finish college. Cooperative projects involving teams of teachers will enable teachers to learn from each other. Students who leave the secondary schools of the future will find it easier to make transition to other schools and job experiences. Schools will provide better and additional data toward placement.

The secondary school of the future will be on a sounder basis in its community. Large numbers of adults will be used as part-time instructors and teaching assistants. Education will be a continuous process as graduation becomes less important because of adult education programs and closer integration of secondary schools and colleges or employment. This will bring about an integration of school and community.

Many varieties of tests will be used to measure success. Evaluation will include attention to students before they enter secondary school and after they leave it. Thus, the evaluation will be broader and deeper, involving more people and things. Some suggestions made by critics are inconsistent and contradictory. Those who would improve the quality of education must consider consequences and alternatives.

Listed below are some recommendations for improving today's educational programs:

1. Students should be given more academic training.
2. More attention should be paid to gifted youth.
3. Quality of teaching should be improved.
4. Needs of the space age should be considered.
5. Professional standards of teachers should be raised.
6. Teacher shortage problems should be solved.
7. Teacher loads should be lightened.

8. Facilities should be improved.

9. Salaries should be increased.

All of the above suggestions for improving the secondary school of the future cannot be achieved for some time, in most situations. But they will never be attained unless action is started. Once a start toward improvement is made, needs for variations and additions will be apparent.

The Commission on the Experimental Study of the Utilization of the Staff in the Secondary School, appointed in 1956, has a responsibility and a challenge. Already it has given evidence of new thinking for the secondary school of the future.

Leila K. Black
Educational Specialist

IMPROVING TEACHING TECHNIQUES AT THE SECONDARY LEVEL

Group Techniques

It is not always possible to create group interest in discussion of a topic; regardless of the common interest of the students in the subject under discussion--some will sit quietly, not taking part in the discussion. It then becomes necessary to take other measures to arouse individual interest of each member of the group. One of the best methods for overcoming this lack of individual participation has been found to be the division of the large group into several, conversational-type units that either chum together, sit together, study together, or have intellectual equality for which there is a mutual respect. In short, the student is more likely to consent to learn if he is at ease in a small unit.

One of the contributions to group learning is that it meets the intellectual, social, and emotional needs of the great variety of personalities present in every classroom. Another is that it is possible for the teacher, by careful direction, to directly influence the patterns of adolescent peer groups by assisting "peripheral" adolescents in finding something to which they belong, a place where they are needed and where their contributions are valued and respected.

Two common methods for starting group work in a classroom are:

1. Develop several small committees to assist in administering the classroom.

2. Start a class with a number of short-term groups, sometimes called "buzz" groups, whose purpose it is to canvass opinion or to make suggestions for class plans in a minimum of time with a maximum of participation. Assuming the students are not too familiar with "buzz" groups, it might be well for the teacher to follow the natural sequence of unit development by dividing the class into small groups of five, for about five minutes to discuss what problems should be studied in the unit. Then let them state what choices they have made, and from there on, arrive at one problem from the various group offerings. Short-term"buzz"groups which are typically used to attack specific jobs, are limited in scope. The tasks can usually be completed in from five to twenty minutes. Good preplanning enhances the probability of success of such groups with all the accompanying bonus of improved morale. Such preplanning should include:

a. Deciding on the problem for the groups to discuss

b. Choosing the strategic moment to initiate the buzz groups

c. Determining how the buzz groups will be chosen

d. Setting a time limit

e. Establishing group organization--selecting chairman, recorder, etc.

f. Arranging for group reports--accomplishments

Long-Term Groups

The setting up of the long-term groups requires meticulous preplanning by the teacher, giving consideration to:

1. Feasible dimensions for the project

2. Equitable division of labor

3. Accessible resources and materials for study

4. Explicit goals of immediate appeal and lasting significance

An exacting analysis by the teacher, based on criteria of interest, ability, background, social relationships, or any other important common element or difference among the students, makes it possible for these long-term groups to function advantageously over long periods of time. This holds true, particularly, in the carrying through of a pertinent problem, such as office management in a business office comprised of various departments--or a similar situation that might face the students in the work-a-day world.

It is suggested that a class, as it progresses, make up a list of standards by which to evaluate its group outcomes - listing "helps" and "hinders" as they pertain to the class. This will be an aid in determining the best methods of group activity.

An anonymous "vote" on the merits of the meeting and its achievements or lack of achievements, will enable the teacher and the group to get a good, over-all look at themselves with a view to correcting any weaknesses which might exist.

A group participation record is another way of evaluating progress.

The use of student "observers" and "recorders" for the purpose of providing valuable experience in evaluation can aid the group when the students return to group status and have in mind what they have learned by observing the good and bad techniques of other participants.

Many teachers have come to a new appreciation of some students by observing the adequacy with which they can operate with their peers. These may be the same students who try and often succeed in making life miserable for teachers. The role of the teacher is to provide support, to give a word of advice where needed, to assist when a real impasse is reached, but, even more, to observe and become well acquainted with the students' potentialities.

Elizabeth Pierce
Educational Specialist

LANGUAGE ARTS - LISTENING

Books on the teaching of reading previous to 1956 rarely had "listening" as an index topic. Today many books devote considerable space to a discussion of listening; one language arts book has 22 listening entries in the index.

Incidence of language activities of the average American studied by P. T. Rankin estimate 40 percent listening, 30 persent speaking, 16 percent reading, and 9 percent writing. 15/

A study of school-age population indicated that 98 percent of their out-of-school language activity was either speaking or listening, but there are approximately 20 times more studies which have appeared in the research literature on reading than on listening.

Attempts have been made to discover trends in listening ability. This is still a great field for research.

Factors that are significant in listening ability:

1. Difficulty level of material
2. Cultural level of population
3. Interest in subject. 16/

Some positive results come from attempts to train in listening. "The following factors are effective in listening:

1. Adequate hearing acuity
2. Recognition of problems and obstacles such as prejudices or boredom
3. Adaptation to the specific kinds of listening situations
4. Relation between auditory vocabulary and visual vocabulary

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15/ Oscar S. Causey, The Reading Teacher's Reader, Ronald Press, 1958, p. 22
16/ Causey, Op. Cit., pp. 23-24

5. Ability to judge what is heard, or ability to listen critically

6. Recognition that communication is a responsibility shared by both speaker and listener." 17/

Listening and interpretation begin early in life. In the beginning, listening is simple and incidental. It progressively becomes more pointed, refined, complex, and functional. In later stages, it becomes appreciative.

School activities require varying degrees of listening. Listening is really a two-way process. Sustained listening offers problems.

Essential factors in effective listening are:

1. The listener must feel motivated to listen.

2. The listener must make adjustments to varied audience situations.

3. The listener must critically evaluate what he hears. 18/

Special comprehension techniques must be developed for different types of listening.

"It is the teacher's responsibility to help the child develop habits of effective listening in order that he may receive clear auditory impressions." 19/

Research carried on at the University of Minnesota shows that six bad listening habits are almost universal. The six bad habits (with suggestions for their correction) are:

Surface Attention

Faking attention--so that the individual appears to be listening but is actually thinking about something unrelated to the

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17/ Ibid., pp. 25-26
18/ William H. Burton, Reading in Child Development, Bobbs-Merrill Company, 1956, p. 441
19/ Kathleen B. Hester, Teaching Every Child to Read, Harper and Brothers, 1955, p. 109

speaker's topic. (Imaginative teaching, audience involvement, and frequent change of pace promote attentive listening.)

Missed Meanings

"I-get-the-facts" listening--in which the listener concentrates so hard on getting the facts that he misses their meanings. (Facts are important; but ideas, supported by facts, are necessary to makg listening meaningful.)

Mental Laziness

Avoiding difficult listening--because it requires a mental effort to follow the speaker. (Give training in critical thinking. Build pride in the ability to follow serious discussions.)

Limited Experiences

Premature dismissal of a subject as uninteresting--because the listener knows so little about it. (Broaden experience background. Give attention to unusual terms, technical experssions, new words and concepts to create interest-points and encourage listening.)

Emphasis on Form

Critizing delivery and physical appearance-- so that the listener fails to get the message. (Put first things first. It's the message that counts most--not the framework.)

Poor Concentration

Yielding easily to distractions--because of inability to concentrate on what is being said. (Remove potential distractions. Teach listening skills.) 20/

Ruth Strickland in The Language Arts in the Elementary School gives a most thorough and enlightening discussion of listening as

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20/ Ralph G. Nichols and Leonard A. Stevens, quoted by Eleanor Johnson in My Weekly Reader

related to children's learning. She quotes early research figures by Rankin, Wilt, and Corey.

"Listening and reading differ in some important respects. As one listens to a person who is speaking, the reaction and interpretation he gives to words are colored by the attitude, the facial expression, voice, and bodily gestures of the speaker. Written words tend to be more impersonal unless one knows the writer well enough to read his attitude into his written words. When the words are impersonal, the reader builds his reaction almost entirely from words themselves. If one's attention wanders in reading, he can go back and pick up the dropped threads. In listening, a portion of what was presented is lost. In reading, one can stop to ponder on points suggested. In listening, one must stay with the task and absorb the sound meaning at the rate at which it comes. One has no control over it." 21/

There are various kinds and stages of listening-- all important to us as teachers. The terms marginal, appreciative, attentive, and analytical listening are terms well defined as to their place in learning.

As teachers we may have missed a vital point if we failed to realize the situation a child is faced with when, from listening only to mother, or mother and father at home, he is thrust into a school situation in which he listens with many and to much, and he must determine what is directed to all, what is directed to him, and what he may listen to in a marginal way--be choosy if he likes.

An extensive bibliography on listening could be prepared.

Gertrude Giesen
Educational Specialist

21/ Ruth G. Strickland, The Language Arts in the Elementary School, D. C. Heath and Co., 1957, p. 117

LENGTH OF SCHOOL DAY AND YEAR

Research shows that any long period of intellectual inactivity causes much forgetting. Also, many children lack supervision of any kind during the long summer vacation.

The continuously expanding curriculum and functions of elementary and secondary schools make it difficult to see how added purposes can be attained without additional time.

Statistical Abstract of U. S., 1957:

Maine - average length of school term - 183 days

New York - " " " " " - 184 days

Missouri - " " " " " - 183 days

Many cities provide for 185-190 actual teaching days of school.

In 1958, New York's Long Beach schools decided to add five minutes to the length of each period in the seven-period day, meaning that most students in the system get an extra 35 minutes of teaching, five days a week. At the State Conference which the superintendent, Dr. David Salten, attended it was suggested to eliminate some holidays, shorten the Christmas recess, etc. Dr. Salten felt there was merit in the idea of lengthening the teaching time, since everything we teach is important, particularly in the elementary curriculum. There is little now being taught that can be taken out. The requirements of today demand that we teach even more. Some educators believe we should be teaching foreign languages in the third grade. If there is more to be added to the curriculum, and nothing to be taken out, more time must be found in which to teach.

The Long Beach faculty objected to cutting out holidays. Teachers proposed that each period be lengthened five minutes. "Actually," says Superintendent Salten," it gives us much more time than cutting out holidays. The school is operating on this plan with full approval."

A longer day in the classrooms for their children has more appeal to Americans than the idea of stretching the school year. Both a longer school day and a lengthened school year have been suggested by some educators.

Research shows that longer school terms result in increased accomplishment of pupils.

There is considerable evidence throughout the nation that the nine-month school term is not long enough.

The continuously expanding curriculum and functions of elementary and secondary schools make it difficult to see how added purposes can be attained under a seemingly constant length of school term.

Dr. Grieder proposes:

1. A 5-hour day for elementary pupils, kindergarten through sixth grade

2. A 7-hour day for junior and senior high school, seventh through twelfth grade

In summary, a significant proportion of the adult population does feel that United States students should put in more time on basic education. Specific proposals depend on the type of change necessary to effect the proposal.

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Mamie M. Searles
Educational Specialist

ADDITIONAL COST TO OPERATE SCHOOLS TEN MONTHS (200 days) RATHER THAN NINE MONTHS (180 days)

Agency	Transportation	Food	Utilities	Teaching Supplies	Other	Total	Total Program for 1959	Percent Increase
101-Cheyenne	$500	$9,653	$1,000	$500	$2,000	$13,653	$681,472	2.0
102-Pierre	600	8,421	725	400	500	10,646	482,070	2.2
103-Flandreau	1,500	10,500	1,500	2,500	3,000	19,000	623,308	3.0
104-Ft. Berthold	1,550	2,562	3,500	450	350	8,412	311,624	2.7
106-Pine Ridge	1,600	14,826	1,873	950	1,410	20,659	1,217,998	1.7
107-Rosebud	450	4,600	650	300	350	6,350	250,635	2.5
109-Sisseton	130	1,083	286	250	165	1,914	108,301	1.8
110-Standing Rk.	1,000	5,880	2,000	1,400	700	10,980	430,535	2.6
111-Turtle Mtn.	1,422	7,482	4,958	1,772	400	16,034	703,247	2.3
112-Wahpeton	-	4,095	2,016	555	500	7,166	406,212	1.8
113-Winnebago	-	-	-	-	-	-	-	-
TOTAL	$8,752	$69,102	$18,508	$9,077	$9,375	$114,814	$5,215,402	2.2

Data compiled by
Ole R. Sande
Asst. Area Director of Schools
Aberdeen Area

NUTRITION EDUCATION IN THE ELEMENTARY AND HIGH SCHOOLS

A positive approach to nutrition teaching is good. For example, the 'burgers, malts, barbecues, and shakes teenagers like, furnish vital food elements of the basic diet, but need supplementation and diversification. Eating habits in the home are known to be largely responsible for the food-intake of a child, but the home atmosphere may have a reverse effect as the child grows older because of psychological tensions, which may result in malnutrition or obesity.

In junior high school there is a breaking away from earlier standards of behavior, a striving for independence and sophistication and a desire to be like the group. Regressions in health practices relating to nutrition are apparent; many go to school without adequate breakfasts and they rely on poorly chosen between-meal snacks. There is much evidence of the lack of ascorbic acid and of other diet deficiencies.

Pedagogical preaching and nagging may only sharpen adolescent resistence and rebellion. Health practices must be related to the deep-down desires and drives of young people.

Secondary school youngsters are interested in nutrition and their interests are built-in motivations toward health education. To have a clearer skin, make the football team, diet to lose weight are specific, real desires of teenagers, indicating teaching approaches which can make nutrition meaningful.

The teacher must guide young people in the acquisition of knowledge and the development of attitudes which will make certain an adequate food plan has the greatest impact on health behavior. 22/

Raising levels of nutrition on a world-wide scale will require increased production of foodstuffs, better distribution in relation to population, and the development and extension of education.

Education in our schools can make a vital contribution to present progress in solving food problems. Methods and approaches for teaching should be adapted to the particular educational situation in which they are to be applied.

22/ Fred V. Hein, A Nutrition Blueprint for Teenagers, Bureau of Health Education, American Medical Association. 1958

Taking into consideration existing food habits and customs there must be education in the right choice of food from that which is available and in the preparation of foods so that they retain their maximum nutritive values. 23/

The American market basket contains a wider variety of foods and more of certain nutrients today than at the beginning of the century. Through education, people have become more aware of the importance of nutrition. Food consumption trends are toward the use of more milk and its products, (other than butter) meats and poultry, eggs, fats, sugars, green and yellow vegetables, and citrus fruits and tomatoes, but away from other fruits and vegetables, especially potatoes. Use of grain products has been steadily downward. 24/

Mary O. Perkinson
Educational Specialist

23/ Food and Agriculture Committee, Mand Hunger, United Nations, 1957
24/ Nutrition Committee News, May-June 1958

NUTRITION EDUCATION IN THE ELEMENTARY AND HIGH SCHOOLS

Trends in Education Based on Research Facts Sheet

Food service programs have improved the nutritional status of students attending schools, but it is now not enough to promulgate programs against specific deficiency diseases. Studies of subclinical deficiencies present indications of suboptimal health, which result in loss of vigor, retarded growth, low resistance to infection, tooth decay, abnormal births, early signs of old age, and other forms of illness and debility. A major health problem today in America is that obesity. Moreover, obesity and subclinical dietary deficiencies, probably occuring together in many individuals, may play an important role in the origin of various chronic diseases. Obesity has replaced the vitamin-deficiency diseases as the number one nutrition problem in the U. S.

It is very easy to assume a complacent attitude, and be oblivious of the fact that many people have poor diets even in a land of plenty, and that these diets are leaving imprints, in light of new nutrition knowledge which should not be ignored. More often than not, nutritional injury, like other physical injuries acquired in the course of living, leave a residue of scars. While the harm done may not be detectable immediately there can be many insidious cumulative effects.

"We are largely what we are because of our yesterdays, and the older we become the more yesterdays have occurred to affect us."

....Stieglits

While present programs are encouraging, we must not let them give us a false sense of security, but must proceed toward the ultimate aim of optimum nutrition: health and well-being for all.

Approach

Nutritional status, by clinical and dietary surveys, reveal that the initial steps of a well-rounded program to minimize mal-nutrition must include a knowledge of what the people eat, what nutrients they need, and why dietary inadequacies prevail.

Objective

1. The prevention and correction of malnutrition

2. The rehabilitation of individuals and population

It is well known that dietary patterns, though firmly rooted in culture, may be modified through education. This is especially true in the case of children depending upon the circumstances in which it is carried out. It is important that people learn to make the right choice of food. Education in sound habits of diet is therefore necessary, based on adequate appraisal of nutritional status. So dramatic, sometimes, are the results of treatment, in certain vitamin deficiencies, that the need for establishing improved dietary habits may be overlooked.

Achievements

Far-reaching results of a successful nutritional program include:

1. Reduction in cost of nutritional diseases
2. Reduction in cost of illness
3. Contribution to healthful, productive adulthood and old age
4. Increase in productivity
5. Increase in purchasing power and consumption
6. Recognition that nutrition has a continuing role in raising the standard of living

Bula E. Reese
Educational Specialist

REPORTING TO PARENTS

Reporting to parents is a necessary function of the school and a part of the planned educational program. The major purpose of reporting pupil progress is to provide information necessary for a sound working relationship between the home and school as a basis for aiding the pupil in his development. The process of reporting progress and the form used must reflect the values, philosophy, and purposes of the school.

Methods of Reporting

1. Conferences:

   Conferences should be scheduled with each parent at intervals throughout the year. Individual portfolios of pupil work should be kept to show the parent. The teacher should prepare for each conference by assembling examples of school work showing degree of progress, by making notes of a student's strong points which she wishes to mention and the weaknesses on which she thinks the parents can give assistance. Notes should be made following the conference.

2. Letters:

   Every parent who has a child in a boarding school should be sent letters by the school administrator at intervals throughout the year. These letters are not so much for the purpose of reporting academic progress, as they are for giving the parent information of a general nature to which he is entitled. Reporting individual academic progress by letter is too time consuming to be practical. In situations when a language barrier exists, letters have an added handicap.

3. Report Cards:

   The report card leaves much to be desired, but to date no one has developed a method of reporting sufficiently superior to replace it to an appreciable extent. Most school systems now advocate conferences and/or letters to supplement the report card. Probably the most controversial issues are:

a. Standards for rating

Shall the student be rated according to progress made within the range of his own abilities?

Shall the student be rated on a competitive basis as compared to members of his own group? Or, as compared to national norms?

b. Types of marks

Percentage grades -- this requires teachers to make very fine distinctions. Seventy percent is generally considered satisfactory and indicates the pupil has earned the right to pass to the next grade, while 69 percent indicates failure. What teacher can, or is willing to grade within such rigid definitions?

Symbolic grades -- the use of letters such as A, B, C, D, and F, or numbers such as I, II, III, IV, and V, or comparative terms such as excellent, good, average, and unsatisfactory are considered an improvement over percentage grades in that pupils are divided into groups according to the quality of their work. Since each symbol represents a wider range of achievement, e. g., A or Excellent equals 95 to 100 percent, the teacher is not forced into quite the narrow line of exactitude as when using percentage grades.

c. Subjective estimates of teachers

The measurement of achievement is not an exact science. Teacher judgment largely determines what grade the pupil will receive and few teachers see a given achievement as corresponding to a certain grade.

d. Characteristics of a good report card

The better form for reporting pupil progress requires a minimum amount of clerical work, can be made understandable to the parents, promotes communication between the school and the home. Its contents will:

(1) Report on all phases of development

(2) Reflect the philosophy of the school

(3) Be understandable to the child

(4) Be suitable to the age level for which it is intended

(5) Facilitate adjustment to other school systems in case of pupil transfer

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Eunice Logan
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SAMPLE STUDIES IN SUPERVISION

Educational Leadership - May 1959

Theme: Supervision

Curriculum Research, May 1959 - pp. 517-520
Column Editor: Alexander Frazier
Contributions: Blenda Proudfoot
Clarence Fielstra
Daisy M. Jones

Summary of Highlights From One of Three Studies in Supervision California Study

Evaluation of points by 400 educational leaders - 50, each, of county superintendents, major city school superintendents, assistant superintendents in charge of instruction, directors of curriculum, secondary school supervisors, and elementary school supervisors.

In terms of both extent of use and effectiveness of use of the 10 most widely used activities were the following:

1. Faculty meetings were ranked first by the group in extent of use; seventh in effectiveness.

2. Classroom visitation ranked second in use; was judged fourth in effectiveness.

3. Grade-level and department meetings ranked high in both rankings; third in use, and second in effectiveness.

4. Teacherworkshop activities in the local district, receiving fourth place in use; were first in effectiveness.

5. Committee and study-group activities were fifth in use; third in effectiveness.

6. College or university courses for advanced degrees and credentials were sixth in use; ninth in effectiveness.

7. Institute programs - seventh and fourteenth.

8. Demonstrations and observations - eighth and fifth.

9. Curriculum library and laboratory use - ninth and tenth.

10. College or university summer sessions workshops on college campus - tenth and eighth.

A study of these results led Fielstra to the following conclusions and recommendations:

1. Faculty meetings, as generally conducted, are of less value as means of instructional improvement than the extent of their use for that purpose would indicate. Of the eight groups of educational leaders questioned, only the group of secondary school principals considered these meetings very "effective" in achieving instructional-improvement goals.

2. Institute programs of the traditional variety are of less value as means of instructional improvement than the extent of their use for that purpose would indicate. Only secondary school principals considered the "extensiveness" of the use of these programs justified by "effectiveness."

3. College or university courses for advanced degree or credentials are of less value as means of instructional improvement than the extent of their use for that purpose would indicate. Only secondary school principals considered such course work to be highly "effective."

4. Considerably greater use should be made of teacher workshop activities on the local district level. All groups of educational leaders, except elementary and secondary school principals, considered such activities to be among the most effective of all means of instructional improvement.

5. More use should be made of teacher committee and study-group activities for instructional improvement. There was rather general agreement that the "effectiveness" of these activities is greater than current "extent" of use would indicate.

6. More use should be made of demonstrations and observations for instructional improvement. There was rather general agreement that the "effectiveness" of these means is greater than present "extent" of use would indicate.

7. Grade level and department meetings should be continued as extensively as at present, if not to an even greater extent. All groups of educational leaders ranked these meetings high in effectiveness, and both elementary and secondary school principals ranked them in first place.

8. Both child study activities and action research are insufficiently used as means of instructional improvement. Although relatively little used, these means were already considered more "effective" than traditional institute programs. With greater use, they may become recognized as among the most effective of all means of instructional improvement.

Orpha McPherson
Educational Specialist

TEACHING TECHNIQUES IN HIGH SCHOOL

It is often pointed out by educators that the methods by which we achieve are at least as, if not more, important to us as is the body of information which we may use while achieving. Method is a "way of doing" and in a democracy the way of doing is of highest importance.

In complex living, which is usual in our country today, how we handle a situation may be the deciding factor in success or failure. Ability to select and use the most suitable techniques, and to locate the appropriate information for the case, is of prime importance in the education of all students, particularly students in high schools.

These abilities must be developed and skills must be taught, practiced, and learned as an important part of the education of students. They cannot be left to chance, if the student is to become a responsible, useful member of society.

Teachers should plan for and give time throughout each week of school to helping students while carrying out their assignments, to actually:

1. Set definite goals for themselves with at least approximate time limits for reaching them; and to work steadily toward achieving these goals

2. Recognize some of their most important and meaningful problems and to state them in clear, concise terms

3. Make and follow through plans for solving these problems, or at least exploring them rather fully, as a regular practice in school work

4. Select and employ for various types of assignments the study skills that are basic to and effective for each occasion.

These are some of the learning techniques that are not yet well enough taught; but which the teacher should stress in her teaching; and which she should make certain her pupils are learning to apply effectively.

Norma C. Runyan
Educational Specialist

TESTING

Testing should be a supplementary process in the evaluation and guidance of pupil growth. Every school should examine carefully its own needs for test information before building its testing program.

When using any evaluation item (test scores, school mark, teacher rating) for evaluation and prediction, the predictive value of the item is greatly increased when measures of the item are taken periodically and accumulated over a period of years.

Testing programs should fit the philosophy and curriculum of the school system in which they are developed.

Test results should be understood and used by teachers, principals, guidance personnel, and administrators. They should never be employed as a measure of the teacher's effectiveness but should be used to help the teacher become more effective.

Achievement test data should always be considered in relation to mental maturity test data. (Achievement Expectancy)

Wallace E. Galluzzi
Educational Specialist

TESTING PROGRAM

What is a testing program? The word "program" has certain implications, such as order, system, and planning. It implies a sequence of events that has been determined upon after careful thought, rather than some haphazard, hit-or-miss affair. A testing program should be sound, it should be usable, and it should meet the needs of the children.

A sound testing program should be supplementary not duplicative; usable not confusing; economical not burdensome; comprehensive not sporadic; suggestive not dogmatic; progressive not static. A testing program should be a planned program to cover a period of years.

A comprehensive testing program consists of eight steps or stages:

1. Purpose

   It must be recognized at all times that tests are only tools, and that measurements are always a means to an end, never an end itself. The first step in planning a testing program is its purpose. It should provide data which will help in the solution of some practical school problems. It should motivate study, or diagnose weaknesses, or provide a basis for remedial instruction.

2. Selecting the appropriate test or tests

   Tests are usually selected on the basis of four major characteristics:

   a. Validity - trueness of the test or its usefulness for a particular purpose

   b. Reliability - consistency of the results

   c. Objectivity - elimination of subjective judgment in scoring

   d. Usability - practicability of cost, ease of administering and scoring, and adequacy of norms

3. Administering the tests

It cannot be stated too strongly that correct administration of the tests is basic to any testing program. Tests administered carelessly will yield invalid results. Directions must be accurately followed.

On the Navajo a testing team in each subagency made up of the educational specialists and principals administer the tests.

4. Scoring of the test

It is emphasized that care and accuracy in scoring the tests are as essential for valid test results as is care in selecting the instruments and the professional competence in administering the tests. In order to insure accuracy in both understanding and applying scoring directions, special training is needed. It is essential that directions for scoring provided in the test manual be followed exactly as stated. The scorer cannot apply his own interpretation to answers.

5. Analyzing and interpreting the scores

There are many terms for teachers to become familiar with in testing. However, teachers can analyze the results of tests in determining strengths and weaknesses of their groups. The test results can be used diagnostically and plans made accordingly. Since testing is done on the Navajo twice a year, the fall testing is to determine the needs or weaknesses. After careful analysis of the results plans are made to correct the deficiencies.

6. How shall we use the results?

Since testing in schools is usually undertaken in an effort to gain an understanding of the individual pupil and to adjust his educational program to his needs, there are several important uses of test results:

a. Guidance

b. Individualization of instruction

c. Diagnosis of strengths and weaknesses

d. Evaluation of effectiveness of different kinds of instructions

e. Research

f. Counseling of parents

g. Reporting to colleges and to prospective employers

Test results help us to see the individual more clearly, as he/she really is.

7. Retesting to determine the success of the program.

After applying remedial measures based on the results of the tests, a check-up should be made to determine the success of the program. This check-up should not be undertaken for at least six months.

On the Navajo the fall testing is done four weeks after the opening of school, and the retesting four weeks before the closing of school.

8. Making suitable records and reports

Certain records and reports are essential to the success of the testing program. In general, four groups are interested in what the tests show: the pupil, the parents, the teachers, and the school administrators.

There are various ways of making a report. However, its general function is always to present test results and related information in such a meaningful way as to arouse interest and action, on the part of the teachers, principals, supervisors, directors of special divisions, and superintendents.

The pupils have every right to know their performances on all achievement tests whether standardized or non-standardized. In many cases it is well to go over the papers with the pupils in order to point out the nature of errors made. The success of any remedial program will depend upon the pupils' cooperation.

The final justification for every testing program rests in Mary Jones or John Smith, and it therefore behooves all persons who are making and giving tests to take them into partnership as soon as completely feasible.

The results of last year's testing on the Navajo show weaknesses in reading comprehension, arithmetic reasoning, and English. They show strengths in arithmetic computation and spelling.

Euphrasia Mitchell
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